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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,360

09/25/2006

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Q93023

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EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,360	Applicant(s) HANITA ET AL.	
	Examiner ELLEN S. WOOD	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/10/2008; 03/28/2006; 02/06/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyoshi (JP 2001-164002 in view of Kikuchi et al. (JP 2002-241608, hereinafter "Kikuchi").

Kiyoshi discloses a resin sheet that may be formed into a container that has a base resin layer of thermoplastic resin (2) and a oxygen absorbing functional component (3) that forms an islands-in-sea structure (abstract and figure 1). The thermoplastic resin forms the sea portion and the oxygen absorbing functional component forms the island (figure 1). The disperse phase is formed with a thermoplastic resin and a gas barrier property resin [0011]. The thermoplastic resin may be polyethylene terephthalate [0018]. The thermoplastic resin to gas barrier property resin ratio is 30/70 – 70/30 [0030].

Kiyoshi discloses that the gas barrier property resin is a polyamide based resin [0021] but is silent with the gas barrier resin containing a oxidizing organic component and a transition metal catalyst.

Kikuchi discloses a container formed from an oxygen uptake nature resin composition [0001]. The resin combines a polyamide resin, an oxidizing organic

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component, and a transition metal system catalyst [0011]. The terminal amino group concentration is not more than $40 \text{ eq}/10^6 \text{ g}$ [0011]. The polyamide is derived from a xylylenediamine and a dicarboxylic acid component [0011]. The oxidizing organic components are a polymer derived from polyenes, especially an acid denaturation polyene system polymer [0011]. The transition metal system catalyst is carboxylate of cobalt [0011]. The oxidizing organic component contains 0.01-10% of the weight of the resin composition [0011]. The transition metal system catalyst is contained in a quantity of 100-3000ppm [0011]. The resin sheet can be laminated to another layer to form a multilayer structure [0035].

Kiyoshi discloses that in order to maintain the oxygen absorbing properties of the resin sheet the gas barrier resin must form in a disperse phase whereas the thermoplastic resin forms the matrix [0034]. It would be obvious to one of ordinary skill in the art that the ratio of the whole surface area of the island portions of the gas barrier resin to the volume of the container would be discovered under routine experimentation in order to enhance the gas uptake from the gas barrier resin composition.

Kiyoshi discloses that the container formed with the structure of the resin sheet has excellent gas barrier properties, transparency, heat resistance, mechanical strength, surface gloss, and surface smoothness [0001]. Kikuchi discloses that the polyamide composition combines oxygen barrier properties and oxygen uptake nature which allows for extended shelf life and maintains the integrity of the contents of the container [0010]. It would be obvious to one of ordinary skill in the art that the polyamide based resin composition of Kikuchi could be combined with the structure

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formation of the resin sheet of Kiyoshi to form a container, because the resin of Kikuchi is polyamide based thus be able to form the structure required in Kiyoshi. Also, the resin of Kiyoshi would enhance the oxygen uptake and oxygen barrier properties of the container.

EXAMINER NOTE: official translations of the prior art have been requested and will be submitted with the next office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on Monday-Friday 7-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ellen S Wood
Examiner
Art Unit 1794

/Carol Chaney/
Supervisory Patent Examiner, Art Unit 1794